

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0015446854](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch C-Grid® Receptacle, Through Hole, Dual Row, High Profile, Vertical, High-Temperature, 54 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-70181 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family PCB Receptacles  
 Series [71850](#)  
 Application Board-to-Board  
 Overview [cgrid\\_sl\\_products](#)  
 Product Name C-Grid®

**Physical**

Circuits (Loaded) 54  
 Color - Resin Black  
 Durability (mating cycles max) 25  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Tin  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Vertical  
 PC Tail Length (in) 0.120 In  
 PC Tail Length (mm) 3.05 mm  
 PCB Locator No  
 PCB Retention None  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.60 mm  
 Packaging Type Tray  
 Pitch - Mating Interface (in) 0.100 In  
 Pitch - Mating Interface (mm) 2.54 mm  
 Plating min: Mating (µin) 150  
 Plating min: Mating (µm) 3.75  
 Plating min: Termination (µin) 150  
 Plating min: Termination (µm) 3.75  
 Polarized to PCB No  
 Temperature Range - Operating -40°C to +105°C  
 Termination Interface: Style Through Hole

**Electrical**

Current - Maximum per Contact 2.5A  
 Voltage - Maximum 250V

**Solder Process Data**

Lead-free Process Capability SMC & Wave Capable (TH only)  
 Process Temperature max. C 260



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free Status**  
**Not Reviewed**

**China RoHS**



**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[71850Series](#)

**Mates With**

[8624](#) , [70203](#) , [70246](#) Straight Header, [70247](#) Right Angle Header, [70287](#) , [70289](#) , [70227](#) , [70567](#) , [70280](#) , [70524](#) , [70260](#) , [8723](#) , [70568](#) , [8724](#) , [71764](#) , [70229](#) , [70216](#) , [71308](#)

**Material Info**

Old Part Number 71850-0090

**Reference - Drawing Numbers**

Packaging Specification PK-70873-0660  
Product Specification PS-70181  
Sales Drawing SDA-71850-0\*\*\*

This document was generated on 05/31/2010

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NOTES:

1. HOUSING MATERIAL: GLASS FILLED LIQUID CRYSTAL POLYMER, UL 94V-0, COLOR: BLACK. TERMINAL MATERIAL: PHOSPHOR BRONZE
2. FINISHES: SEE CHART SHEET 2.
3. REFER TO PRODUCT SPECIFICATION PS-70181.
4. PACKAGING IN TRAYS PER PK-70873-0660.
5. SEE SHEET 2 FOR CIRCUIT SIZES AND OVERALL DIMENSIONS.
6. RECOMMENDED PCB THICKNESS (1.37-1.80)/.054-.071.
7. PART COMPLIES WITH CLASS C REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.



SECTION C-C

REMOVE 71850-0232 EC NO: UCP2009-0115 DRAWING: GVERILL 2008/07/22 CHKD: HKIPPER 2008/07/25 APPR: FSM LTH 2008/07/28	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <td></td> <td>mm</td> <td>INCH</td> </tr> <tr> <td>4 PLACES</td> <td>± .---</td> <td>± .---</td> </tr> <tr> <td>3 PLACES</td> <td>± .---</td> <td>± .005</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.13</td> <td>± .010</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± .---</td> </tr> </table>		mm	INCH	4 PLACES	± .---	± .---	3 PLACES	± .---	± .005	2 PLACES	± 0.13	± .010	1 PLACE	± 0.25	± .---	DIMENSION STYLE MM/IN	SCALE INCH	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
		mm	INCH																		
	4 PLACES	± .---	± .---																		
	3 PLACES	± .---	± .005																		
2 PLACES	± 0.13	± .010																			
1 PLACE	± 0.25	± .---																			
REV E2	DESCRIPTION DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY SKL	DATE 1988/02/29	CHECKED BY MJM	DATE 1988/02/29															
		ANGULAR ±1/2°	APPROVED BY WAZ	DATE 1988/02/29	MATERIAL NO. SEE TABLE	DOCUMENT NO. SDA-71850-0***															
			SIZE C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			SHEET NO. 1 OF 2														

SECTION D-D

J	CKT. SIZE		TERMINAL: 70172-0004 PLATING: TIN			TERMINAL: 70172-0006 PLATING: 15 GOLD			TERMINAL: 70172-0008 PLATING: 30 GOLD			DIM. "A"		DIM. "B"	
	PER ROW	TOTAL	EDP NO	ENG NO	RELEASED FOR MANUFACTURING	EDP NO	ENG NO	RELEASED FOR MANUFACTURING	EDP NO	ENG NO	RELEASED FOR MANUFACTURING	MM	INCH	MM	INCH
												MM	INCH	MM	INCH
	2	4	15-44-6804	A-71850-0065		15-44-5804	A-71850-0129		15-44-5104	A-71850-0193		2,54	.100	5,05	.199
	3	6	15-44-6806	A-71850-0066		15-44-5806	A-71850-0130		15-44-5106	A-71850-0194		5,08	.200	7,59	.299
	4	8	15-44-6808	A-71850-0067		15-44-5808	A-71850-0131		15-44-5108	A-71850-0195		7,62	.300	10,13	.399
	5	10	15-44-6810	A-71850-0068		15-44-5810	A-71850-0132		15-44-5110	A-71850-0196		10,16	.400	12,67	.499
I	6	12	15-44-6812	A-71850-0069		15-44-5812	A-71850-0133		15-44-5112	A-71850-0197		12,70	.500	15,21	.599
	7	14	15-44-6814	A-71850-0070		15-44-5814	A-71850-0134		15-44-5114	A-71850-0198		15,24	.600	17,75	.699
	8	16	15-44-6816	A-71850-0071		15-44-5816	A-71850-0135		15-44-5116	A-71850-0199		17,78	.700	20,29	.799
	9	18	15-44-6818	A-71850-0072		15-44-5818	A-71850-0136		15-44-5118	A-71850-0200		20,32	.800	22,83	.899
	10	20	15-44-6820	A-71850-0073		15-44-5820	A-71850-0137		15-44-5120	A-71850-0201		22,86	.900	25,37	.999
	11	22	15-44-6822	A-71850-0074		15-44-5822	A-71850-0138		15-44-5122	A-71850-0202		25,40	1,000	27,91	1,099
H	12	24	15-44-6824	A-71850-0075		15-44-5824	A-71850-0139		15-44-5124	A-71850-0203		27,94	1,100	30,45	1,199
	13	26	15-44-6826	A-71850-0076		15-44-5826	A-71850-0140		15-44-5126	A-71850-0204		30,48	1,200	32,99	1,299
	14	28	15-44-6828	A-71850-0077		15-44-5828	A-71850-0141		15-44-5128	A-71850-0205		33,02	1,300	35,53	1,399
	15	30	15-44-6830	A-71850-0078		15-44-5830	A-71850-0142		15-44-5130	A-71850-0206		35,56	1,400	38,07	1,499
	16	32	15-44-6832	A-71850-0079		15-44-5832	A-71850-0143		15-44-5132	A-71850-0207		38,10	1,500	40,61	1,599
	17	34	15-44-6834	A-71850-0080		15-44-5834	A-71850-0144		15-44-5134	A-71850-0208		40,64	1,600	43,15	1,699
G	18	36	15-44-6836	A-71850-0081		15-44-5836	A-71850-0145		15-44-5136	A-71850-0209		43,18	1,700	45,69	1,799
	19	38	15-44-6838	A-71850-0082		15-44-5838	A-71850-0146		15-44-5138	A-71850-0210		45,72	1,800	48,23	1,899
	20	40	15-44-6840	A-71850-0083		15-44-5840	A-71850-0147		15-44-5140	A-71850-0211		48,26	1,900	50,77	1,999
	21	42	15-44-6842	A-71850-0084		15-44-5842	A-71850-0148		15-44-5142	A-71850-0212		50,80	2,000	53,31	2,099
	22	44	15-44-6844	A-71850-0085		15-44-5844	A-71850-0149		15-44-5144	A-71850-0213		53,34	2,100	55,85	2,199
	23	46	15-44-6846	A-71850-0086		15-44-5846	A-71850-0150		15-44-5146	A-71850-0214		55,88	2,200	58,39	2,299
	24	48	15-44-6848	A-71850-0087		15-44-5848	A-71850-0151		15-44-5148	A-71850-0215		58,42	2,300	60,93	2,399
F	25	50	15-44-6850	A-71850-0088		15-44-5850	A-71850-0152		15-44-5150	A-71850-0216		60,96	2,400	63,47	2,499
	26	52	15-44-6852	A-71850-0089		15-44-5852	A-71850-0153		15-44-5152	A-71850-0217		63,50	2,500	66,01	2,599
	27	54	15-44-6854	A-71850-0090		15-44-5854	A-71850-0154		15-44-5154	A-71850-0218		66,04	2,600	68,55	2,699
	28	56	15-44-6856	A-71850-0091		15-44-5856	A-71850-0155		15-44-5156	A-71850-0219		68,58	2,700	71,09	2,799
	29	58	15-44-6858	A-71850-0092		15-44-5858	A-71850-0156		15-44-5158	A-71850-0220		71,12	2,800	73,63	2,899
	30	60	15-44-6860	A-71850-0093		15-44-5860	A-71850-0157		15-44-5160	A-71850-0221		73,66	2,900	76,17	2,999
E	31	62	15-44-6862	A-71850-0094		15-44-5862	A-71850-0158		15-44-5162	A-71850-0222		76,20	3,000	78,71	3,099
	32	64	15-44-6864	A-71850-0095		15-44-5864	A-71850-0159		15-44-5164	A-71850-0223		78,74	3,100	81,25	3,199
	33	66	15-44-6866	A-71850-0096		15-44-5866	A-71850-0160		15-44-5166	A-71850-0224		81,28	3,200	83,79	3,299
	34	68	15-44-6868	A-71850-0097		15-44-5868	A-71850-0161		15-44-5168	A-71850-0225		83,82	3,300	86,33	3,399
	35	70	15-44-6870	A-71850-0098		15-44-5870	A-71850-0162		15-44-5170	A-71850-0226		86,36	3,400	88,87	3,499
	36	72	15-44-6872	A-71850-0099		15-44-5872	A-71850-0163		15-44-5172	A-71850-0227		88,90	3,500	91,41	3,599
	37	74	15-44-6874	A-71850-0100		15-44-5874	A-71850-0164		15-44-5174	A-71850-0228		91,44	3,600	93,95	3,699
D	38	76	15-44-6876	A-71850-0101		15-44-5876	A-71850-0165		15-44-5176	A-71850-0229		93,98	3,700	96,49	3,799
	39	78	15-44-6878	A-71850-0102		15-44-5878	A-71850-0166		15-44-5178	A-71850-0230		96,52	3,800	99,03	3,899
	40	80	15-44-6880	A-71850-0103		15-44-5880	A-71850-0167		15-44-5180	A-71850-0231		99,06	3,900	101,57	3,999

**PLATING PER ES-88-\*\*\***  
 TIN - (3.81 MICROMETERS)/150 MICROINCHES MINIMUM TIN OVERALL OVER NICKEL UNDERPLATE OVERALL.  
 15 GOLD - (0.38 MICROMETERS)/15 MICROINCHES MINIMUM GOLD PLATE IN SELECT AREA, (1.90 MICROMETERS)/75 MICROINCHES MINIMUM TIN IN SELECT AREA OVER NICKEL UNDERPLATE OVERALL.  
 30 GOLD - (0.76 MICROMETERS)/30 MICROINCHES MINIMUM GOLD PLATE IN SELECT AREA, (1.90 MICROMETERS)/75 MICROINCHES MINIMUM TIN IN SELECT AREA OVER NICKEL UNDERPLATE OVERALL.

<b>REMOVE 71850-0232</b> EC NO: UCP2009-0115 DRAWINGVERTILL 2008/07/22 CHKD:HK/PPER 2008/07/25 APPR:FSM/LTH 2008/07/28 REV:	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	MM/IN	1:1	INCH	
	▽=0	4 PLACES ± --- ± ---	DRAWN BY DATE	TITLE	SALES VERTICAL MOUNT DUAL ROW HIGH TEMP .100 X .100 PC GRID	
		3 PLACES ± --- ± .005	SKL 1988/02/29	SKL 1988/02/29	MOLEX INCORPORATED	
	2 PLACES ± 0.13 ± .010	1 PLACE ± 0.25 ± ---	CHECKED BY DATE	MATERIAL NO. DOCUMENT NO. SHEET NO.		
	ANGULAR ± 1/2°		MJM 1988/02/29	SDA-71850-0*** 2 OF 2		
			APPROVED BY DATE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
			WAZ 1988/02/29			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				